1						
2						
3						
4						
5						
6						
7						
8	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 10					
10	IN THE MATTER OF:					
11	Upper Columbia River Site)					
12	Teck Cominco Metals, Ltd.					
13	Trail, British Columbia,					
14	RESPONDENT)					
15	Proceeding Under Sections 104, 122(a), and 122(d)(3) of the Comprehensive) U.S. EPA Docket and 122(d)(3) Number					
16	Environmental Response, Compensation, and Liability Act, as amended,					
17	42 U.S.C §§ 9604, 9622(a), 9622(d)(3).					
18)					
19						
20	ADMINISTRATIVE ORDER ON CONSENT					
21	FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY					
22	I. <u>INTRODUCTION</u>					
23	1. This Administrative Order on Consent (AOC) is entered into voluntarily by the					
2425	United States Environmental Protection Agency (EPA) and Teck Cominco Metals Ltd.					
26	(Respondent). The AOC concerns the preparation of, performance of, and reimbursement for all					
27	costs incurred by EPA in connection with a Remedial Investigation and Feasibility Study (RI/FS) for					
28	ADMINISTRATIVE ORDER ON CONSENT FOR REMEDIAL INVESTIGATION AND FEASIBILITY STUDY - Page 1					

. 4	T T	~ 1 1 .	D: 0:		c c	TTT 1 .	44		
tha	Inno	r ('Alumbia	Pivar Cita	located in the	a ctata at	W/achington	ac wall ac	nact rec	nonca cocte
uic	O	i Columbia	INIVEL SHE	iocaicu iii uic	state or	w asimigion	as well as	Dasi 10s	DONSE COSIS

1

3

4 5

> 6 7

8

10

9

11 12

13

14

15

16 17

18

19

20

21

22 23

25

26

27

28

II. JURISDICTION

2. This AOC is issued under the authority vested in the President of the United States by Sections 104, 122(a), and 122(d)(3) of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. §§ 9604, 9622(a), and 9622(d)(3) (CERCLA). This authority was delegated to the Administrator of EPA on January 23, 1987, by Executive Order 12580, 52 Fed. Reg. 2926 (1987), and further delegated to Regional Administrators on September 13, 1987, by EPA Delegation No. 14-14-C. This authority has been redelegated by the Regional Administrator to the Region 10 Director, Environmental

3. The Respondent agrees to undertake all actions required by the terms and conditions of this AOC. In any action by EPA or the United States to enforce the terms of this AOC, Respondent consents to and agrees not to contest the authority or jurisdiction of the Regional Administrator to issue or enforce this AOC, and agrees not to contest the validity of this Order or its terms.

III. PARTIES BOUND

- 4. This AOC shall apply to and be binding upon EPA and shall be binding upon the Respondent, its agents, successors, assigns, officers, directors, and principals. Respondent is jointly and severally responsible for carrying out all actions required of it by this AOC. The signatories to this AOC certify that they are authorized to execute and legally bind the parties they represent to this AOC. No change in the ownership or corporate status of the Respondent or of the facility or Site shall alter Respondent's responsibilities under this AOC.
- 5. The Respondent shall provide a copy of this AOC to any subsequent owners or successors before ownership rights or stock or assets in a corporate acquisition are transferred.

ADMINISTRATIVE ORDER ON CONSENT FOR REMEDIAL INVESTIGATION AND FEASIBILITY STUDY - Page 2

Cleanup Office (ECL), and further delegated to ECL Unit Managers.

Respondent shall provide a copy of this AOC to all contractors, subcontractors, laboratories, and consultants which are retained to conduct any work performed under this AOC, within fourteen (14) days after the effective date of this AOC or the date of retaining their services, whichever is later. Respondent shall condition any such contracts upon satisfactory compliance with this AOC. Notwithstanding the terms of any contract, Respondent is responsible for compliance with this AOC and for ensuring that its subsidiaries, employees, contractors, consultants, subcontractors, agents, and attorneys comply with this AOC.

IV. STATEMENT OF PURPOSE

- 6. In entering into this AOC, the objectives of EPA and the Respondent are: (a) to determine the nature and extent of contamination and any threat to the public health, welfare, or the environment caused by the release or threatened release of hazardous substances, pollutants, or contaminants at or from the Site or facility, by conducting an RI; (b) to determine and evaluate alternatives for remedial action (if any) to prevent, mitigate, or otherwise respond to or remedy any release or threatened release of hazardous substances, pollutants, or contaminants at or from the Site or facility, by conducting an FS; and (c) to recover response and oversight costs incurred by EPA with respect to this AOC.
- 7. The activities conducted under this AOC are subject to approval by EPA and shall provide all appropriate necessary information for the RI/FS, with the exception of the Baseline Risk Assessment performed by EPA, and for a Record of Decision that is consistent with CERCLA and the National Oil and Hazardous Substance Pollution Contingency Plan (NCP), 40 C.F.R. Part 300. The activities conducted under this AOC shall be conducted in compliance with all applicable EPA guidance, policies, and procedures.

V. FINDINGS OF FACT

8. The Upper Columbia River Site consists of the areal extent of contamination in the

12

13

19

20

21

22 23 25

26 27 Upper Columbia River, and all suitable areas in proximity to the contamination necessary for implementation of response action. The Upper Columbia River Site is the principal inflow to Franklin D. Roosevelt Lake (Lake Roosevelt), the reservoir behind Grand Coulee Dam and contributes about 90% of the flow from a large drainage area in Canada and the United States. Approximately 15 river miles south of the U. S.-Canada border, the river becomes characteristic of a lake/reservoir due to the Grand Coulee Dam.

- 9. The reservoir was developed into a major recreational and economic resource for the surrounding area attracting more than one million visitors per year. Recreational use of the area has been extensive including activities such as fishing, swimming, camping, and boating. The Upper Columbia River and surrounding area is also habitat to wildlife, plants, a varied fish community, and other aquatic species, including species listed under the Endangered Species Act (ESA).
- 10. The Confederated Tribes of the Colville Indian Reservation (Colville Tribes) and the Spokane Tribe of Indians (Spokane Tribe) own reservation lands along the Upper Columbia River. The Colville Tribes and the Spokane Tribe have treaty-reserved rights and resources, and/or other rights, interests, or resources in the Site. The Colville Tribes petitioned EPA in August 1999, pursuant to Section 105 of CERCLA 42 U.S.C. § 9605, to conduct an assessment of hazardous substance contamination along the Columbia River extending approximately 150 river miles from the U.S.-Canada border to the Grand Coulee Dam.
- 11. EPA began conducting the site assessment in October 1999. EPA selected a Site Assessment Area from approximately river mile 745 near the U.S.-Canada border to river mile 675. This area is called the Upper Columbia River Site Assessment Area (Assessment Area). In conducting the site assessment, EPA found contaminants at the Upper Columbia River Site including, but not limited to, heavy metals such as arsenic, cadmium, copper, lead, mercury and zinc. EPA did not conduct an analysis for dioxin and furan in the Assessment Area, though these contaminants remain a concern. EPA also observed the presence of slag, a by-product of the

smelting furnaces, containing glassy ferrous granules and other metals, at beaches and other depositional areas at the Assessment Area.

- 12. The Site has been the subject of numerous studies by various governmental entities. Sources identified in these studies include releases from mining and milling operations, fertilizer production, smelting operations, pulp and paper production, sewage treatment plants, and other industrial activities.
- 13. Contaminants found at the Site are known to be toxic to humans and aquatic life. Routes of human exposure to slag and contaminated sediment include direct contact with slag on the beaches of the Upper Columbia River, contact with contaminated sediment during low draw down periods, inhalation of airborne particles, dermal contact, and ingestion. There is also a concern of human exposure from ingestion of lake/river water contaminated as a result of contact with slag or contaminated sediments. Consumption of fish, aquatic resources, native plants, and agricultural crops are also potential routes of human exposure.
- 14. Potential environmental effects of slag discharged to the Upper Columbia River include both chemical (increased metal loads, potential bioaccumulation, toxicity problems in biota) and physical (scouring of plants and animals from river substrates, severe erosion of fish gills, smothering of habitat) components. Some benthic organisms can accumulate toxins that are attached to sediment particles that the benthic organism ingests. Toxins accumulated in benthic organisms can be transferred up the food chain to higher predators such as fish.
- 15. EPA completed its site assessment in March 2003. Pursuant to the Hazard Ranking System, published as a federal regulation on December 14, 1990 (55 Fed. Reg. 51532), the Site received a hazardous ranking score above 28.50, making the Site eligible for listing on EPA's National Priorities List (NPL). Currently, the Site is being considered by EPA for possible inclusion on the NPL.
- 16. Respondent owns and operates an integrated smelting and refining complex in Trail, British Columbia (hereinafter referred to as the "Trail Smelter") situated approximately 10

9601(9).

river miles north of the U. S.-Canada border. Respondent has arranged for the disposal of its hazardous substances from the Trail Smelter into the Upper Columbia River by directly discharging up to 145,000 tonnes of slag annually prior to mid-1995. Effluent, such as slag, is discharged into the Columbia River through several outfalls at the Trail Smelter. The slag contains metals including, but not limited to, copper, lead, and zinc. The slag was carried downstream in the passing river current and settled in slower flowing quiescent areas.

17. The Trail Smelter facility also produces a variety of sulfur products and agricultural fertilizers which represent a potential source of mercury. Historically, the Trail Smelter discharged sulfur dioxide into the air increasing its discharge of sulfur dioxide from 4,700 tons a month to 10,000 tons a month in 1925. Citizens of the town of Northport, Washington situated just south of the U. S.-Canada border in the Columbia River valley, complained that pollution from the Trail smelter was threatening their health and environment.

VI. CONCLUSIONS OF LAW AND DETERMINATIONS

- 18. The Site is a "facility" as defined in Section 101(9) of CERCLA, 42 U.S.C. §
- 19. Wastes and constituents thereof at the Site, sent to the Site, disposed of at the Site, and/or transported to the Site identified in Paragraphs 11 and 16 are "hazardous substances" as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14), or constitute "any pollutant or contaminant" that may present an imminent and substantial danger to public health or welfare under Section 104(a)(1) of CERCLA, 42 U.S.C. § 9604(a)(1).
- 20. The presence of hazardous substances at the Site or the past, present, or potential migration of hazardous substances currently located at or emanating from the Site, constitute actual and/or threatened "releases" as defined in Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).
- 21. Respondent is a "person" as defined in Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

- 22. Respondent is a responsible party under Sections 104, 107, and 122 of CERCLA, 42 U.S.C. §§ 9604, 9607, and 9622.
- 23. The actions required by this AOC are necessary to protect the public health or welfare or the environment, are in the public interest, 42 U.S.C. § 9622(a), are consistent with CERCLA and the NCP, 42 U.S.C. §§ 9604(a)(1) and 9622(a), and will expedite effective remedial action and minimize litigation, 42 U.S.C. § 9622(a).

VII. <u>NOTICE</u>

24. By providing a copy of this AOC to the state, EPA is notifying the state of Washington that this Order is being issued and that EPA is the lead agency for coordinating, overseeing, and enforcing the response action required by the Order.

VIII. WORK TO BE PERFORMED

25. All work performed under this AOC shall be under the direction and supervision of qualified personnel. Within thirty (30) days of the effective date of this Order, and before the work outlined below begins, the Respondent shall notify EPA, in writing, of the names, titles, and qualifications of the personnel, including contractors, subcontractors, consultants, and laboratories to be used in carrying out such work. The qualifications of the persons undertaking the work for Respondent shall be subject to EPA's review, for verification that such persons meet minimum technical background and experience requirements. This Order is contingent on Respondent's demonstration to EPA's satisfaction that Respondent is qualified to perform properly and promptly the actions set forth in this AOC. If EPA disapproves, in writing, of any person(s)' technical qualifications, Respondent shall notify EPA of the identity and qualifications of the replacement(s) within thirty (30) days of the written notice. If EPA subsequently disapproves of the replacement(s), EPA reserves the right to terminate this Order and to conduct a complete RI/FS, and to seek reimbursement for costs and penalties from Respondent. During the course of the RI/FS,

11

12

13

14

15

16

17

18

19

21

22

23

24

25

2627

28

Respondent shall notify EPA, in writing, of any changes or additions in the personnel used to carry out such work, providing their names, titles, and qualifications. EPA shall have the same right to approve changes and additions to personnel as it has hereunder regarding the initial notification.

26. Respondent shall conduct activities and submit deliverables as provided by the attached RI/FS Statement of Work, which is incorporated by reference, for the development of the RI/FS. All such work shall be conducted in accordance with CERCLA, the NCP, and EPA guidance including, but not limited to, the "Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA" (OSWER Directive # 9355.3-01), "Guidance for Data Usability in Risk Assessment" (OSWER Directive # 9285.7-05) and guidance referenced therein, and guidance referenced in the Statement of Work, as may be amended or modified by EPA. The general activities that Respondent is required to perform are identified below, followed by a list of deliverables. The tasks that Respondent must perform are described more fully in the Statement of Work and guidance. The activities and deliverables identified below shall be developed as provisions in the Work Plan and Sampling and Analysis Plan, and shall be submitted to EPA as provided. All work performed under this AOC shall be in accordance with the schedules herein, and in full accordance with the standards, specifications, and other requirements of the Work Plan and Sampling and Analysis Plan, as initially approved or modified by EPA, and as may be amended or modified by EPA from time to time. For the purposes of this Order, day means calendar day unless otherwise noted in the Order.

A. <u>Task I: Scoping</u>. EPA determines the Site-specific objectives of the RI/FS and devises a general management approach for the Site, as stated in the attached Statement of Work. Respondent shall conduct the remainder of scoping activities as described in the attached Statement of Work and referenced guidance. At the conclusion of the project planning phase, Respondent shall provide EPA with the following deliverables:

1. RI/FS Work Plan. Within two hundred ten (210) days of the effective date of this Order,

Respondent shall submit to EPA a complete RI/FS Work Plan. If EPA disapproves of or requires revisions to the RI/FS Work Plan, in whole or in part, Respondent shall amend and submit to EPA a revised Work Plan which is responsive to the directions in all EPA comments, within thirty (30) days of receiving EPA's comments.

- 2. <u>Sampling and Analysis Plan</u>. Within two hundred ten (210) days of the effective date of this Order, Respondent shall submit to EPA the Sampling and Analysis Plan. This plan shall consist of a Field Sampling Plan (FSP) and a Quality Assurance Project Plan (QAPP), as described in the Statement of Work and guidance. If EPA disapproves of, or requires revisions to, the Sampling and Analysis Plan, in whole or in part, Respondent shall amend and submit to EPA a revised Sampling and Analysis Plan which is responsive to the directions in all EPA comments, within thirty (30) days of receiving EPA's comments.
- 3. <u>Site Health and Safety Plan</u>. Within two hundred ten (210) days of the effective date of this Order, Respondent shall submit to EPA the Site Health and Safety Plan.
- Following approval or modification by EPA, the RI/FS Work Plan and the Sampling and Analysis Plan are incorporated by reference herein.
- B. <u>Task II: Community Relations Plan</u>. EPA will prepare a Community Relations Plan, in accordance with EPA guidance and the NCP. Respondent shall provide information supporting EPA's community relations programs.

When requested by EPA, Respondent also shall provide EPA with the following deliverable:

Technical Assistance Plan: Within 30 days of a request by EPA, Respondent shall provide EPA with a Technical Assistance Plan (TAP) for providing and administering up to \$50,000 of Respondent's funds to be used by a qualified community group to hire independent technical advisors during the Work conducted pursuant to this Consent Order. The TAP shall state that Respondent will provide and administer any additional amounts needed if EPA, in its unrevieweable discretion, determines that the selected community group has demonstrated such a need prior to EPA's issuance of the ROD contemplated by this Order. If EPA disapproves of or requires revisions

to the TAP, in whole or in part, Respondent shall amend and submit to EPA a revised TAP that is responsive to EPA's comments, within thirty (30) days of receiving EPA's comments.

C. <u>Task III: Site Characterization</u>. Following EPA approval or modification of the Work Plan and Sampling and Analysis Plan, Respondent shall implement the provisions of these plans to characterize the Site. Respondent shall complete Site characterization within twelve (12) months of EPA approval or modification of the Work Plan and Sampling and Analysis Plan. Respondent shall provide EPA with analytical data within fifteen (15) days of each sampling activity, in a electronic format (i.e., computer disk) showing the location, medium, and results. Within seven (7) days of completion of field activities, Respondent(s) shall notify EPA, in writing. During Site characterization, Respondent shall provide EPA with the following deliverables, as described in the Statement of Work and Work Plan:

- 1. Technical Memorandum on Modeling of Site Characteristics. Where Respondent proposes that modeling is appropriate, within sixty (60) days of the initiation of Site characterization, Respondent shall submit a technical memorandum on modeling of Site characteristics, as described in the Statement of Work. If EPA disapproves of or requires revisions to the technical memorandum on modeling of Site characteristics, in whole or in part, Respondent shall amend and submit to EPA a revised technical memorandum on modeling of Site characteristics which is responsive to the directions in all EPA comments, within thirty (30) days of receiving EPA's comments.
- 2. <u>Preliminary Site Characterization Summary</u>. Within sixty (60) days of completion of the field sampling and analysis, as specified in the Work Plan, Respondent shall submit a Site characterization summary to EPA.
- D. <u>Draft Remedial Investigation Report</u> Within sixty (60) days of receipt, Respondent shall submit a draft remedial investigation report consistent with the Statement of Work, Work Plan, and Sampling and Analysis Plan. If EPA disapproves of or requires revisions to the RI report, in whole or in part, Respondent shall amend and submit to EPA a revised RI report which is responsive to the

ADMINISTRATIVE ORDER ON CONSENT FOR REMEDIAL INVESTIGATION AND FEASIBILITY STUDY - Page 10

directions in all EPA comments, within thirty (30) days of receiving EPA's comments.

- E. <u>Task IV</u>: <u>Treatability Studies</u>. Respondent shall conduct treatability studies, except where Respondent can demonstrate to EPA's satisfaction that they are not needed. Major components of the treatability studies include determination of the need for, and scope of, studies, the design of the studies, and the completion of the studies, as described in the Statement of Work. During treatability studies, Respondent shall provide EPA with the following deliverables:
 - 1. <u>Identification of Candidate Technologies Memorandum</u>. This memorandum shall be submitted within thirty (30) days of the effective date of this Order. If EPA disapproves of or requires revisions to the technical memorandum identifying candidate technologies, in whole or in part, Respondent shall amend and submit to EPA a revised technical memorandum identifying candidate technologies which is responsive to the directions in all EPA comments, within thirty (30) days of receiving EPA's comments.
 - 2. <u>Treatability Testing Statement of Work</u>. If EPA determines that treatability testing is required, within sixty (60) days thereafter [or as specified by EPA], Respondent shall submit a treatability testing statement of work.
 - 3. Treatability Testing Work Plan. Within thirty (30) days of submission of the Treatability Testing Statement of Work, Respondent shall submit a Treatability Testing Work Plan, including a schedule. If EPA disapproves of, or requires revisions to, the Treatability Testing Work Plan, in whole or in part, Respondent shall amend and submit to EPA a revised Treatability Testing Work Plan which is responsive to the directions in all EPA comments, within thirty (30) days of receiving EPA's comments.
 - 4. <u>Treatability Study Sampling and Analysis Plan</u>. Within thirty (30) days of the identification of the need for a separate or revised QAPP or FSP, Respondent shall submit a Treatability Study Sampling and Analysis Plan. If EPA disapproves of or requires revisions to the Treatability Study Sampling and Analysis Plan, in whole or in part, Respondent shall amend and submit to EPA a revised Treatability Study Sampling and Analysis Plan which is

responsive to the directions in all EPA comments, within thirty (30) days of receiving EPA's comments.

- 5. <u>Treatability Study Site Health and Safety Plan</u>. Within thirty (30) days of the identification of the need for a revised Health and Safety Plan, Respondent shall submit a Treatability Study Site Health and Safety Plan.
- 6. <u>Treatability Study Evaluation Report</u>. Within sixty (60) days of completion of any treatability testing, Respondent shall submit a Treatability Study Evaluation Report as provided in the Statement of Work and Work Plan. If EPA disapproves of or requires revisions to the Treatability Study Report, in whole or in part, Respondent shall amend and submit to EPA a Revised Treatability Study Report which is responsive to the directions in all EPA comments, within thirty (30) days of receiving EPA's comments.
- F. <u>Task V: Development and Screening of Alternatives</u>. Respondent shall develop an appropriate range of waste management options that will be evaluated through the development and screening of alternatives, as provided in the Statement of Work and Work Plan. During the development and screening of alternatives, Respondent shall provide EPA with the following deliverables:
 - 1. <u>Memorandum on Remedial Action Objectives</u>. Within thirty (30) days of receipt of EPA's Baseline Risk Assessment, Respondent shall submit a memorandum on remedial action objectives.
 - 2. <u>Memorandum on Development and Preliminary Screening of Alternatives, Assembled Alternatives Screening Results and Final Screening.</u> Within sixty (60) days of submittal of the memorandum on remedial action objectives, Respondent shall submit a memorandum summarizing the development and screening of remedial alternatives, including an alternatives array document as described in the Statement of Work.
- G. <u>Task VI</u>: <u>Detailed Analysis of Alternatives</u>. Respondent shall conduct a detailed analysis of remedial alternatives, as described in the Statement of Work and Work Plan. During the detailed analysis of alternatives, Respondent shall provide EPA with the following deliverables and

presentation:

- 1. Report on Comparative Analysis and Presentation to EPA. Within sixty (60) days of submission of a memorandum on the development and screening of remedial alternatives, Respondent shall submit a report on comparative analysis to EPA summarizing the results of the comparative analysis performed between the remedial alternatives. If EPA disapproves of or requires revisions to the report on comparative analysis, Respondent shall amend and submit to EPA a revised report on comparative analysis which is responsive to the directions in all EPA comments, within thirty (30) days of receiving EPA's comments. Within two (2) weeks of submitting the original report on comparative analysis, Respondent shall make a presentation to EPA during which Respondent shall summarize the findings of the RI and remedial action objectives, and present the results of the nine criteria evaluation and comparative analysis, as described in the Statement of Work.
- 2. <u>Draft Feasibility Study Report</u>. Within sixty (60) days of the presentation to EPA, Respondent shall submit a Draft FS Report which reflects the findings in EPA's Baseline Risk Assessment. Respondent shall refer to Table 6-5 of the RI/FS Guidance for report content and format. If EPA disapproves of or requires revisions to the Draft FS Report, in whole or in part, Respondent shall amend and submit to EPA a Revised FS Report which is responsive to the directions in all EPA comments, within thirty (30) days of receiving EPA's comments. The report, as amended, and the administrative record, shall provide the basis for the Proposed Plan under CERCLA §§ 113(k) and 117(a) by EPA, and shall document the development and analysis of remedial alternatives.
- 27. EPA reserves the right to comment on, modify, and direct changes for all deliverables. At EPA's discretion, Respondent must fully correct all deficiencies and incorporate and integrate all information and comments supplied by EPA either in subsequent or resubmitted deliverables.
 - 28. Respondent shall not proceed further with any subsequent activities or tasks until

receiving EPA approval for the following deliverables: RI/FS Work Plan, Sampling and Analysis Plan, Draft RI Report, Treatability Testing Work Plan, and Sampling and Analysis Plan, and Draft FS Report. While awaiting EPA approval on these deliverables, Respondent shall proceed with all other tasks and activities which may be conducted independently of these deliverables, in accordance with the schedule set forth in this AOC.

- 29. Upon receipt of the Draft FS Report, EPA will evaluate, as necessary, the estimates of the risk to the public and environment that are expected to remain after a particular remedial alternative has been completed.
- 30. For all remaining deliverables not enumerated above in Paragraph 28, Respondent shall proceed with all subsequent tasks, activities, and deliverables without awaiting EPA approval on the submitted deliverable. EPA reserves the right to stop Respondent from proceeding further, either temporarily or permanently, on any task, activity, or deliverable at any point during the RI/FS.
- 31. In the event that Respondent amends or revises a report, plan, or other submittal upon receipt of EPA comments, if EPA subsequently disapproves of the revised submittal, or if subsequent submittals do not fully reflect EPA's directions for changes, EPA retains the right to seek stipulated or statutory penalties, perform its own studies, complete the RI/FS (or any portion of the RI/FS) under CERCLA and the NCP, and seek reimbursement from the Respondent for its costs, and/or seek any other appropriate relief.
- 32. In the event that EPA takes over some of the tasks, but not the preparation of the RI/FS, Respondent shall incorporate and integrate information supplied by EPA into the Final RI/FS Report.
- 33. Neither failure of EPA to expressly approve or disapprove of Respondent's submissions within a specified time period(s), nor the absence of comments, shall be construed as approval by EPA. Whether or not EPA gives express approval for Respondent's deliverables, Respondent is responsible for preparing deliverables acceptable to EPA.

34. Respondent shall, prior to any off-Site shipment of hazardous substances from the Site to an out-of-state waste management facility, provide written notification to the appropriate state environmental official in the receiving state and to EPA's Designated Project Coordinator of such shipment of hazardous substances. However, the notification of shipments shall not apply to any such off-Site shipments when the total volume of such shipments will not exceed ten (10) cubic yards.

- (a) The notification shall be in writing, and shall include the following information, where available: (1) the name and location of the facility to which the hazardous substances are to be shipped; (2) the type and quantity of the hazardous substances to be shipped; (3) the expected schedule for the shipment of the hazardous substances; and (4) the method of transportation. Respondent shall notify the receiving state of major changes in the shipment plan, such as a decision to ship the hazardous substances to another facility within the same state, or to a facility in another state.
- (b) The identity of the receiving facility and state will be determined by Respondent following the award of the contract for the RI/FS. Respondent shall provide all relevant information, including information under the categories noted in Paragraph 34(a) above, on the off-Site shipments, as soon as practical after the award of the contract and before the hazardous substances are actually shipped.

IX. EPA'S BASELINE RISK ASSESSMENT

- 35. EPA will perform the Baseline Risk Assessment. Respondent shall support EPA in the effort by providing various information to EPA as outlined above. The major components of the Baseline Risk Assessment include contaminant identification, exposure assessment, toxicity assessment, and human health and ecological risk characterization.
- 36. EPA will provide, after review of the Respondent's Site characterization summary, sufficient information concerning the baseline risks such that the Respondent can begin

drafting the FS Report and the Memorandum on Remedial Action Objectives. This information will normally be in the form of two or more Baseline Risk Assessment memoranda prepared by EPA. One memorandum will generally include a list of the chemicals of concern for human health and ecological effects and the corresponding toxicity values. Another should list the current and potential future exposure scenarios, exposure assumptions, and exposure point concentrations that EPA plans to use in the Baseline Risk Assessment. The public, including the Respondent, may comment on these memoranda. However, the Agency is obligated to respond only to significant comments that are submitted during the formal public comment period.

- 37. After considering any significant comments received, EPA will prepare a Baseline Risk Assessment Report based on the data collected by the Respondent during the Site characterization. EPA will release this report to the public at the same time it releases the Final RI Report. Both reports will be put into the administrative record for the Site.
- 38. EPA will respond to all significant comments on the memoranda or the Baseline Risk Assessment that are resubmitted during the formal comment period in the Responsiveness Summary of the Record of Decision.

X. MODIFICATION OF THE WORK PLAN

- 39. If at any time during the RI/FS process, Respondent identifies a need for additional data, a memorandum documenting the need for additional data shall be submitted to the EPA Project Coordinator within twenty (20) days of identification. EPA, in its discretion, will determine whether the additional data will be collected by Respondent and whether it will be incorporated into reports and deliverables.
- 40. In the event of conditions posing an immediate threat to human health or welfare or the environment, Respondent shall notify EPA and the state immediately. In the event of unanticipated or changed circumstances at the Site, Respondent shall notify the EPA Project Coordinator by telephone within twenty-four (24) hours of discovery of the unanticipated or

changed circumstances. In addition to the authorities in the NCP, in the event that EPA determines that the immediate threat or the unanticipated or changed circumstances warrant changes in the Work Plan, EPA shall modify or amend the Work Plan, in writing, accordingly. Respondent shall perform the Work Plan as modified or amended.

41. EPA may determine that in addition to tasks defined in the initially approved Work Plan, other additional work may be necessary to accomplish the objectives of the RI/FS as set forth in the Statement of Work for this RI/FS. EPA may require that the Respondent perform these response actions in addition to those required by the initially approved Work Plan, including any approved modifications, if it determines that such actions are necessary for a complete RI/FS. Respondent shall confirm its willingness to perform the additional work, in writing, to EPA within seven (7) days of receipt of the EPA request or Respondent shall invoke dispute resolution. Subject to EPA resolution of any dispute, Respondent shall implement the additional tasks which EPA determines are necessary. The additional work shall be completed according to the standards, specifications, and schedule set forth or approved by EPA in a written modification to the Work Plan or written Work Plan Supplement. EPA reserves the right to conduct the work itself at any point, to seek reimbursement from Respondent, and/or to seek any other appropriate relief.

XI. QUALITY ASSURANCE

42. Respondent shall assure that work performed, samples taken, and analyses conducted conform to the requirements of the Statement of Work, the QAPP and guidance identified therein. Respondent will assure that field personnel used by Respondent are properly trained in the use of field equipment and in chain-of-custody procedures.

23

XII. FINAL RI/FS, PROPOSED PLAN, PUBLIC COMMENT. RECORD OF DECISION, AND ADMINISTRATIVE RECORD

43. EPA retains the responsibility for the release to the public of the RI/FS Report.

EPA retains responsibility for the preparation and release to the public of the Proposed Plan and the

27

28

Record of Decision in accordance with CERCLA and the NCP.

44. EPA shall provide Respondent with the final RI/FS Report, Proposed Plan, and Record of Decision.

45. EPA will determine the contents of the administrative record file for selection of the remedial action. Respondent must submit to EPA documents developed during the course of the RI/FS upon which selection of the response action may be based. Respondent shall provide copies of plans, task memoranda, including documentation of field modifications, recommendations for further action, quality assurance memoranda and audits, raw data, field notes, laboratory analytical reports, and other reports. Respondent must additionally submit any previous studies conducted under state, local, or other federal authorities relating to selection of the response action, and all communications between Respondent and state, local, or other federal authorities concerning selection of the response action. At EPA's discretion, Respondent may establish a community information repository at or near the Site, to house one copy of the administrative record.

XIII. PROGRESS REPORTS AND MEETINGS

46. Respondent shall make presentations at, and participate in, meetings at the request of EPA during the initiation, conduct, and completion of the RI/FS. In addition to discussion of the technical aspects of the RI/FS, topics will include anticipated problems or new issues. Meetings will be scheduled at EPA's discretion.

47. In addition to the deliverables set forth in this Order, Respondent shall provide to EPA monthly progress reports by the tenth (10th) day of the following month. At a minimum, with respect to the preceding month, these progress reports shall: (1) describe the actions which have been taken to comply with this AOC during that month; (2) include all results of sampling and tests and all other data received by the Respondent; (3) describe work planned for the next two (2) months with schedules relating such work to the overall project schedule for RI/FS completion; and (4) describe all problems encountered and any anticipated problems, any actual or anticipated

delays.

J

21 22

ADMINISTRATIVE ORDER ON CONSENT FOR REMEDIAL INVESTIGATION AND FEASIBILITY STUDY - Page 19

XIV. SAMPLING, ACCESS, AND DATA AVAILABILITY/ADMISSIBILITY

delays, and solutions developed and implemented to address any actual or anticipated problems or

48. All results of sampling, tests, modeling, or other data (including raw data) generated by Respondent, or on Respondent's behalf, during implementation of this AOC, shall be submitted to EPA in the subsequent Monthly Progress Report as described in Section XIII of this Order. EPA will make available to the Respondent validated data generated by EPA unless it is exempt from disclosure by any federal or state law or regulation.

49. Respondent will verbally notify EPA at least fifteen (15) days prior to conducting significant field events as described in the Statement of Work, Work Plan, or Sampling and Analysis Plan. At EPA's verbal or written request, or the request of EPA's oversight assistant, Respondent shall allow split or duplicate samples to be taken by EPA (and its authorized representatives) of any samples collected by the Respondent in implementing this AOC. All split samples of Respondent shall be analyzed by the methods identified in the QAPP.

50. At all reasonable times, EPA and its authorized representatives shall have the authority to enter and freely move about all property at the Site and off-Site areas where work, if any, is being performed, for the purposes of inspecting conditions, activities, the results of activities, records, operating logs, and contracts related to the Site or Respondent and its contractor pursuant to this Order; reviewing the progress of the Respondent in carrying out the terms of this AOC; conducting tests as EPA or its authorized representatives deem necessary; using a camera, sound recording device, or other documentary type equipment; and verifying the data submitted to EPA by the Respondent. The Respondent shall allow these persons to inspect and copy all records, files, photographs, documents, sampling and monitoring data, and other writings related to work undertaken in carrying out this AOC. Nothing herein shall be interpreted as limiting or affecting EPA's right of entry or inspection authority under federal law. All parties with access to the Site

- 51. The Respondent may assert a claim of business confidentiality covering part or all of the information submitted to EPA pursuant to the terms of this AOC under 40 C.F.R. § 2.203, provided such claim is allowed by Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7). This claim shall be asserted in the manner described by 40 C.F.R. § 2.203(b), and substantiated at the time the claim is made. Information determined to be confidential by EPA will be given the protection specified in 40 C.F.R. Part 2. If no such claim accompanies the information when it is submitted to EPA, it may be made available to the public by EPA or the state without further notice to the Respondent. Respondent agrees not to assert confidentiality claims with respect to any data related to Site conditions, sampling, or monitoring.
- 52. In entering into this Order, Respondent waives any objections to any data gathered, generated, or evaluated by EPA, the state or Respondent in the performance or oversight of the work that has been verified according to the quality assurance/quality control (QA/QC) procedures required by the AOC or any EPA-approved Work Plans or Sampling and Analysis Plans. If Respondent objects to any other data relating to the RI/FS, Respondent shall submit to EPA a report that identifies and explains its objections, describes the acceptable uses of the data, if any, and identifies any limitations to the use of the data. The report must be submitted to EPA within fifteen (15) days of the monthly progress report containing the data.
- 53. If the Site, or the off-Site area that is to be used for access or is within the scope of the RI/FS, is owned in whole or in part by parties other than those bound by this AOC, Respondent will obtain, or use its best efforts to obtain, Site access agreements from the present owner(s) within sixty (60) days of the effective date of this AOC. Such agreements shall provide access for EPA, its contractors and oversight officials, the state and its contractors, and the Respondent or its authorized representatives, and such agreements shall specify that Respondent is not EPA's representative with respect to liability associated with Site activities. Copies of such agreements shall be provided to EPA prior to Respondent's initiation of field activities.

14

15

16

17

18

19

20

21

22

23

24

25

26

12

1

2

3

4

5

6

7

8

9

10

11

XV. DESIGNATED PROJECT COORDINATORS

54. Documents including reports, approvals, disapprovals, and other correspondence which must be submitted under this AOC, shall be sent by certified mail, return receipt requested, to the following addressees or to any other addressees which the Respondent and EPA designate in writing:

(a) Documents to be submitted to EPA should be sent to [seven copies]:

Cami Grandinetti EPA Project Coordinator Environmental Cleanup Office U.S. Environmental Protection Agency Region 10 1200 Sixth Avenue, Mail Code ECL-113 Seattle, Washington 98101

(b) Documents to be submitted to the Respondent should be sent to [include number of copies]:

Name, Title, Teck Cominco Metals Ltd.

27

28

ADMINISTRATIVE ORDER ON CONSENT FOR REMEDIAL INVESTIGATION AND FEASIBILITY STUDY - Page 22

55. On or before the effective date of this AOC, EPA and the Respondent shall each designate their own Project Coordinator. Each Project Coordinator shall be responsible for overseeing the implementation of this AOC. To the maximum extent possible, communications between the Respondent and EPA shall be directed to the Project Coordinator by mail, with copies to such other persons as EPA, the state, and Respondent may respectively designate.

Communications include, but are not limited to, all documents, reports, approvals, and other correspondence submitted under this AOC.

- 56. EPA and the Respondent each have the right to change their respective Project Coordinator. The other party must be notified, in writing, at least ten (10) days prior to the change.
- 57. EPA's Project Coordinator shall have the authority lawfully vested in a Remedial Project Manager (RPM) and On-Scene Coordinator (OSC) by the NCP. In addition, EPA's Project Coordinator shall have the authority consistent with the NCP, to halt any work required by this AOC, and to take any necessary response action when he or she determines that conditions at the Site may present an immediate endangerment to public health or welfare or the environment. The absence of the EPA Project Coordinator from the area under study pursuant to this AOC shall not be cause for the stoppage or delay of work.
- 58. EPA shall arrange for a qualified person to assist in its oversight and review of the conduct of the RI/FS, as required by Section 104(a) of CERCLA, 42 U.S.C. § 9604(a). The oversight assistant may observe work and make inquiries in the absence of EPA, but is not authorized to modify the Work Plan.

XVI. OTHER APPLICABLE LAWS

59. Respondent shall comply with all laws that are applicable when performing the RI/FS. No local, state, or federal permit shall be required for any portion of any action conducted

Section 121 of CERCLA, 42 U.S.C. § 9621.

20 21

ADMINISTRATIVE ORDER ON CONSENT FOR REMEDIAL INVESTIGATION AND FEASIBILITY STUDY - Page 23

XVII. RECORD PRESERVATION

entirely on-Site, including studies, where such action is selected and carried out in compliance with

60. All records and documents in EPA's and Respondent's possession that relate in any way to the Site shall be preserved during the conduct of this AOC and for a minimum of ten (10) years after commencement of construction of any remedial action. The Respondent shall acquire and retain copies of all documents that relate to the Site and are in the possession of its employees, agents, accountants, contractors, or attorneys. After this 10-year period, the Respondent shall notify EPA at least ninety (90) days before the documents are scheduled to be destroyed. If EPA requests that the documents be saved, the Respondent shall, at no cost to EPA, give EPA the documents or copies of the documents.

XVIII. DISPUTE RESOLUTION

61. Any disputes concerning activities or deliverables required under this Order, excluding the Baseline Risk Assessment, for which dispute resolution has been expressly provided for, shall be resolved as follows: If the Respondent objects to any EPA notice of disapproval or requirement made pursuant to this AOC, Respondent shall notify EPA's Project Coordinator, in writing, of its objections within fourteen (14) days of receipt of the disapproval notice or requirement. Respondent's written objections shall define the dispute, state the basis of Respondent's objections, and be sent certified mail, return receipt requested. EPA and the Respondent then have an additional fourteen (14) days to reach agreement. If an agreement is not reached within fourteen (14) days, Respondent may request a determination by EPA's Director, Environmental Cleanup Office (ECL). The ECL Director's determination is EPA's final decision. Respondent shall proceed in accordance with EPA's final decision regarding the matter in dispute, regardless of whether Respondent agrees with the decision. If the Respondent does not agree to

5 6 7 perform or does not actually perform the work in accordance with EPA's final decision, EPA reserves the right in its sole discretion to conduct the work itself, to seek reimbursement from the Respondent, to seek enforcement of the decision, to seek stipulated penalties, and/or to seek any other appropriate relief.

62. Respondent is not relieved of its obligations to perform and conduct activities and submit deliverables on the schedule set forth in the Work Plan, while a matter is pending in dispute resolution. The invocation of dispute resolution does not stay stipulated penalties under this Order.

9

XIX. DELAY IN PERFORMANCE/STIPULATED PENALTIES

- 63. For each day that the Respondent fails to complete a deliverable in a timely manner or fails to produce a deliverable of acceptable quality, or otherwise fails to perform in accordance with the requirements of this Order, Respondent shall be liable for stipulated penalties. Penalties begin to accrue on the day that performance is due or a violation occurs, and extend through the period of correction. Where a revised submission by Respondent is required, stipulated penalties shall continue to accrue until a satisfactory deliverable is produced. EPA will provide written notice for violations that are not based on timeliness; nevertheless, penalties shall accrue from the day a violation commences. Payment shall be due within thirty (30) days of receipt of a demand letter from EPA.
- 63. Respondents shall pay interest on the unpaid balance, which shall begin to accrue at the end of the 30-day period, at the rate established by the Department of Treasury pursuant to 30 U.S.C. § 3717. Respondents shall further pay a handling charge of one percent (1%), to be assessed at the end of each thirty-one (31) day period, and a six percent (6%) per annum penalty charge, to be assessed if the penalty is not paid in full within ninety (90) days after it is due.
 - 64. Respondent shall make all payments by forwarding a check to:

U.S. Environmental Protection Agency Superfund Accounting

27

28

20

21

22

23

24

25

26

P.O. Box 360903M Pittsburgh, Pennsylvania 15251

Checks should identify the name of the Site, the Site identification number, the account number, and the title of this Order. A copy of the check and/or transmittal letter shall be forwarded to the EPA Project Coordinator.

- 65. For the following major deliverables, stipulated penalties shall accrue in the amount of \$1,000 per day, per violation, for the first seven days of noncompliance; \$5,000 per day, per violation, for the 8th through 14th day of noncompliance; \$10,000 per day, per violation, for the 15th day through the 30th day; and \$20,000 per day per violation for all violations lasting beyond thirty (30) days.
 - 1) An original and any revised Work Plan.
 - 2) An original and any revised Sampling and Analysis Plan.
 - 3) An original and any revised RI Report.
 - 4) An original and any revised Treatability Testing Work Plan.
 - 5) An original and any revised Treatability Study Sampling and Analysis Plan.
 - 6) An original and any revised FS Report.
- 66. For the following interim deliverables, stipulated penalties shall accrue in the amount of \$300 per day, per violation, for the first week of noncompliance; \$750 per day, per violation, for the 8th through 14th day of noncompliance; \$2,500 per day, per violation, for the 15th day through the 30th day of noncompliance; and \$5,000 per day per violation for all violations lasting beyond thirty (30) days.
 - 1) Technical memorandum on modeling of Site characteristics.
 - 2) Preliminary Site Characterization Summary.
 - 3) Summary of RI data.
 - 4) Identification of candidate technologies memorandum.
 - 5) Treatability Testing Statement of Work.
 - 6) Treatability Study Evaluation Report.

- 7) Memorandum on remedial action objectives.
- 8) Memoranda on development and preliminary screening of alternatives, assembled alternatives screening results, and final screening.
- 9) Comparative analysis report.
- 67. For the Monthly Progress Reports, stipulated penalties shall accrue in the amount of \$200 per day, per violation, for the first week of noncompliance; \$500 per day, per violation, for the 8th through 14th day of noncompliance; \$1,000 per day, per violation, for the 15th day through the 30th day; and \$2,000 per day, per violation, for all violations lasting beyond thirty (30) days.
- 68. Respondent may dispute EPA's right to the stated amount of penalties by invoking the dispute resolution procedures under Section XVIII herein. Penalties shall accrue, but need not be paid, during the dispute resolution period. If Respondent do not prevail upon resolution, all penalties shall be due to EPA within thirty (30) days of resolution of the dispute. If Respondent prevails upon resolution, no penalties shall be paid.
- 69. In the event that EPA provides for corrections to be reflected in the next deliverable and does not require resubmission of that deliverable, stipulated penalties for that interim deliverable shall cease to accrue on the date of such decision by EPA.
- 70. The stipulated penalties provisions do not preclude EPA from pursuing any other remedies or sanctions which are available to EPA because of the Respondent's failure to comply with this AOC, including, but not limited to, conduct of all or part of the RI/FS by EPA. Payment of stipulated penalties does not alter Respondent's obligation to complete performance under this AOC.

XX. FORCE MAJEURE

71. "Force Majeure," for purposes of this AOC, is defined as any event arising from causes entirely beyond the control of the Respondent and of any entity controlled by Respondent, including their contractors and subcontractors, that delays the timely performance of any obligation under this AOC notwithstanding Respondent's best efforts to avoid the delay. The requirement that

the Respondent exercise "best efforts to avoid the delay" includes using best efforts to anticipate any potential Force Majeure event and best efforts to address the effects of any potential Force Majeure event (1) as it is occurring, and (2) following the potential Force Majeure event, such that the delay is minimized to the greatest extent practicable. Examples of events that are not Force Majeure events include, but are not limited to, increased costs or expenses of any work to be performed under this Order or the financial difficulty of Respondent to perform such work.

72. If any event occurs or has occurred that may delay the performance of any obligation under this Order, whether or not caused by a Force Majeure event, Respondent shall notify, by telephone, the Remedial Project Manager or, in his or her absence, the Director of the Environmental Cleanup Office, EPA Region 10, within forty-eight (48) hours of when the Respondent knew or should have known that the event might cause a delay. Within five (5) business days thereafter, Respondent shall provide, in writing, the reasons for the delay, the anticipated duration of the delay, all actions taken or to be taken to prevent or minimize the delay, a schedule for implementation of any measures to be taken to mitigate the effect of the delay, and a statement as to whether, in the opinion of Respondent, such event may cause or contribute to an endangerment to public health, welfare, or the environment. Respondent shall exercise best efforts to avoid or minimize any delay and any effects of a delay. Failure to comply with the above requirements shall preclude Respondent from asserting any claim of Force Majeure.

73. If EPA agrees that the delay or anticipated delay is attributable to Force Majeure, the time for performance of the obligations under this Order that are directly affected by the Force Majeure event shall be extended by agreement of the parties, pursuant to Section XXVII of this Order, for a period of time not to exceed the actual duration of the delay caused by the Force Majeure event. An extension of the time for performance of the obligation directly affected by the Force Majeure event shall not, of itself, extend the time for performance of any subsequent obligation.

74. If EPA does not agree that the delay or anticipated delay has been or will be

1	caused by a Force Majeure event, or does not agree with Respondent on the length of the extension,
2	the issue shall be subject to the dispute resolution procedures set forth in Section XVIII of this
3	Order. In any such proceeding, to qualify for a Force Majeure defense, Respondent shall have the
4	burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has
5	been or will be caused by a Force Majeure event, that the duration of the delay was or will be
6	warranted under the circumstances, that Respondent did exercise or is exercising due diligence by
7	using its best efforts to avoid and mitigate the effects of the delay, and that Respondent complied
8	with the requirements of Paragraph 72.
9	75. Should Respondent carry the burden set forth in Paragraph 74, the delay at issue
10	shall be deemed not to be a violation of the affected obligation of this AOC.
11	
12	XXI. <u>REIMBURSEMENT OF PAST COSTS</u>
13	76. Within fifteen (15) days of the effective date of this Order, Respondent shall
14	remit a certified or cashiers check to EPA in the amount of \$ 1,844,550, as previously demanded in
15	the RI/FS Special Notice Letter, dated October 10, 2003, together with interest that has accrued
16	thereon at the rate of interest specified for the Hazardous Substances Superfund under Section
17	107(a) of CERCLA, 42 U.S.C. § 9607(a), for all past response costs incurred by the United States in
18	its conduct of assessment activities at the Site from March 22, 2000 to September 30, 2003.
19	77. Checks should be made payable to the Hazardous Substances Superfund and
20	should include the name of the Site, the Site identification number, the operable unit, if any, the
21	Regional Lock Box Number, account number, and the title of this Order. Checks should be
22	forwarded to:
23	U.S. Environmental Protection Agency Superfund Accounting
24	P.O. Box 360903M Pittsburgh, Pennsylvania 15251
25	78. A copy of the check should be sent simultaneously to the EPA Project
26	70. A copy of the check should be sent simultaneously to the Li A i loject

ADMINISTRATIVE ORDER ON CONSENT FOR REMEDIAL INVESTIGATION AND FEASIBILITY STUDY - Page 28

Coordinator.

27

28

XXII. REIMBURSEMENT OF RESPONSE AND OVERSIGHT COSTS

79. Following the issuance of this AOC, EPA shall submit to the Respondent on a
periodic basis an accounting of all response costs including oversight costs incurred by the U.S.
Government with respect to this RI/FS. Response costs may include, but are not limited to, costs
incurred by the U.S. Government in overseeing Respondent's implementation of the requirements of
this Order and activities performed by the government as part of the RI/FS and community relations
including any costs incurred while obtaining access. Costs shall include all direct and indirect costs
including, but not limited to, time and travel costs of EPA personnel and associated indirect costs,
contractor costs, cooperative agreement costs, compliance monitoring, including the collection and
analysis of split samples, inspection of RI/FS activities, Site visits, discussions regarding disputes
that may arise as a result of this AOC, review and approval or disapproval of reports, costs of
performing the Baseline Risk Assessment, EPA's costs in preparing the Proposed Plan, the Record
of Decision, and the Response to Comment, and costs of redoing any of Respondent's tasks. Any
necessary summaries, including, but not limited to, EPA's certified Agency Financial Management
System summary data (SPUR Reports), or such other summary as certified by EPA, shall serve as
basis for payment demands.

- 80. Respondent shall, within thirty (30) days of receipt of each accounting, remit a certified or cashier's check for the amount of those costs. Interest shall accrue from the latter of: the date payment of a specified amount is demanded in writing; or the date of the expenditure. The interest rate is the rate of interest on investments for the Hazardous Substances Superfund in Section 107(a) of CERCLA, 42 U.S.C. § 9607(a).
- 81. Checks should be made payable to the Hazardous Substances Superfund and should include the name of the Site, the Site identification number, the account number and the title of this Order. Checks should be forwarded to:

U.S. Environmental Protection Agency Superfund Accounting P.O. Box 360903M Pittsburgh, Pennsylvania 15251

82. Copies of the transmittal letter and check should be sent simultaneously to the EPA Project Coordinator.

83. Respondent agrees to limit any disputes concerning costs to accounting errors and the inclusion of costs outside the scope of this AOC. Any disputes regarding payment of costs shall be governed by the resolution procedures of Section XVIII of this Order. Respondent shall identify any contested costs and the basis of its objection. All undisputed costs shall be remitted by Respondent in accordance with the schedule set forth above. Disputed costs shall be paid by Respondent into an escrow account while the dispute is pending. Respondent bears the burden of establishing an EPA accounting error or the inclusion of costs outside the scope of this AOC.

XXIII. RESERVATIONS OF RIGHTS AND REIMBURSEMENT OF OTHER COSTS

84. EPA reserves the right to bring an action against the Respondent under Section 107 of CERCLA, 42 U.S.C. § 9607, for recovery of all response costs including oversight costs, incurred by the United States at the Site that are not reimbursed by the Respondent, any costs incurred in the event that EPA performs the RI/FS or any part thereof, and any future costs incurred by the United States in connection with response activities conducted under CERCLA at this Site.

- 85. EPA reserves the right to bring an action against Respondent to enforce the past costs and response and oversight cost reimbursement requirements of this AOC, to collect stipulated penalties assessed pursuant to Section XIX of this AOC, and to seek penalties pursuant to Section 109 of CERCLA, 42 U.S.C. § 9609.
- 86. Except as expressly provided in this Order, each party reserves all rights and defenses it may have. Nothing in this AOC shall affect EPA's removal authority or EPA's response or enforcement authorities including, but not limited to, the right to seek injunctive relief, stipulated penalties, statutory penalties, and/or punitive damages.
- 87. Following satisfaction of the requirements of this AOC, Respondent shall have resolved its liability to EPA for the work performed by Respondent pursuant to this AOC.

Respondent is not released from liability, if any, for any response actions taken beyond the scope of this Order regarding removals, other operable units, remedial design/remedial action of this operable unit, or activities arising pursuant to Section 121(c) of CERCLA, 42 U.S.C. § 9621(c).

XXIV. DISCLAIMER

88. By signing this AOC and taking actions under this Order, the Respondent does not necessarily agree with EPA's Findings of Fact and Conclusions of Law. Furthermore, the participation of the Respondent in this Order shall not be considered an admission of liability and is not admissible in evidence against the Respondent in any judicial or administrative proceeding other than a proceeding by the United States, including EPA, to enforce this AOC or a judgment relating to it. Respondent retains its rights to assert claims against other potentially responsible parties at the Site. However, the Respondent agrees not to contest the validity or terms of this Order, or the procedures underlying or relating to it in any action brought by the United States, including EPA, to enforce its terms.

XXV. NATURAL RESOURCE DAMAGE ASSESSMENT PROVISION

For the purposes of Section 113(g)(1) of CERCLA, the parties agree that, upon issuance of this AOC for performance of an RI/FS at the Site, remedial action under CERCLA shall be deemed to be scheduled and an action for damages (as defined in 42 U.S.C. § 9601(6) must be commenced within 3 years after the completion of the remedial action.

XXVI. OTHER CLAIMS

90. In entering into this Order, Respondent waives any right to seek reimbursement under Section 106(b) of CERCLA, 42 U.S.C. § 9696(b). Respondent also waives any right to present a claim under Section 111 or 112 of CERCLA, 42 U.S.C. §§ 9611 or 9612. This Order does not constitute any decision on preauthorization of funds under Section 111(a)(2) of CERCLA,

42 U.S.C. § 9611(a)(2). Respondent further waives all other statutory and common law claims against EPA, including, but not limited to, contribution and counterclaims, relating to or arising out of conduct of the RI/FS.

- 91. Nothing in this Order shall constitute or be construed as a release from any claim, cause of action, or demand in law or equity against any person, firm, partnership, subsidiary, or corporation not a signatory to this AOC for any liability it may have arising out of, or relating in any way to, the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous substances, pollutants, or contaminants found at, taken to, or taken from the Site.
 - 92. Respondent shall bear its own costs and attorneys fees.

XXVII. FINANCIAL ASSURANCE, INSURANCE, AND INDEMNIFICATION

- 93. Respondent shall establish and maintain a financial instrument or trust account or other financial mechanism acceptable to EPA, funded sufficiently to perform the work and any other obligations required under this AOC, including a margin for cost overruns. Within fifteen (15) days after the effective date of this AOC, Respondent shall fund the financial instrument or trust account sufficiently to perform the work required under this AOC projected for the period beginning with the effective date of the Order through December 31, 2003. Beginning January 1, 2004, and on or before the 15th calendar day of each calendar year quarter thereafter, Respondent shall fund the financial instrument or trust account sufficiently to perform the work and other activities required under this Order projected for the succeeding calendar year quarter.
- 94. If at any time the net worth of the financial instrument or trust account is insufficient to perform the work and other obligations under the Order for the upcoming quarter, Respondent shall provide written notice to EPA within seven (7) days after the net worth of the financial instrument or trust account becomes insufficient. The written notice shall describe why the financial instrument or trust account is funded insufficiently and explain what actions have been or will be taken to fund the financial instrument or trust account adequately.

- 95. (a) Prior to commencement of any work under this Order, Respondent shall secure, and shall maintain in force for the duration of this Order, and for two (2) years after the completion of all activities required by this AOC, Comprehensive General Liability ("CGL") and automobile insurance, with limits of \$ five (5) million dollars, combined single limit, naming as insured the United States. The CGL insurance shall include Contractual Liability Insurance in the amount of \$ 1 million per occurrence, and Umbrella Liability Insurance in the amount of \$ 2 million per occurrence.
- (b) Respondent shall also secure, and maintain in force for the duration of this Order and for two (2) years after the completion of all activities required by this AOC the following:
 - i. Professional Errors and Omissions Insurance in the amount of \$ 1,000,000.00 per occurrence.
 - ii. Pollution Liability Insurance in the amount of \$1,000,000.00 per occurrence, covering as appropriate both general liability and professional liability arising from pollution conditions.
- (c) For the duration of this Order, Respondent shall satisfy, or shall ensure that their contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of employer's liability insurance and workmen's compensation insurance for all persons performing work on behalf of the Respondent, in furtherance of this Order.
- (d) If Respondent demonstrates by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering the same risks but in a lesser amount, then with respect to that contractor or subcontractor Respondent need provide only that portion of the insurance described above which is not maintained by the contractor or subcontractor.
- (e) Prior to commencement of any work under this Order, and annually thereafter on the anniversary of the effective date of this Order, Respondent shall provide to EPA certificates of such insurance and a copy of each insurance policy.
 - 95. At least seven (7) days prior to commencing any work under this AOC,

Respondent shall certify to EPA that the required insurance has been obtained by that contractor.

96. The Respondent agrees to indemnify and hold the United States Government, its agencies, departments, agents, and employees harmless from any and all claims or causes of action arising from or on account of acts or omissions of Respondent, its employees, agents, servants, receivers, successors, or assignees, or any persons including, but not limited to, firms, corporations, subsidiaries, and contractors, in carrying out activities under this AOC. The United States Government or any agency or authorized representative thereof shall not be held as a party to any contract entered into by Respondent in carrying out activities under this AOC.

9

XXVIII. EFFECTIVE DATE AND SUBSEQUENT MODIFICATION

- 97. The effective date of this AOC shall be the date it is signed by EPA.
- 98. This AOC may be amended by mutual agreement of EPA and Respondent. Amendments shall be in writing and shall be effective when signed by EPA. EPA Project Coordinators do not have the authority to sign amendments to the AOC.
- 99. No informal advice, guidance, suggestions, or comments by EPA regarding reports, plans, specifications, schedules, and any other writing submitted by the Respondent will be construed as relieving the Respondent of its obligation to obtain such formal approval as may be required by this Order. Any deliverables, plans, technical memoranda, reports (other than progress reports), specifications, schedules, and attachments required by this AOC are, upon approval by EPA, incorporated into this Order.

21 22

23

25

26

20

XXVIX. TERMINATION AND SATISFACTION

100. This AOC shall terminate when the Respondent demonstrates, in writing, and certifies to the satisfaction of EPA that all activities required under this AOC, including any additional work, payment of past costs, response and oversight costs, and any stipulated penalties demanded by EPA, have been performed and EPA has approved the certification. This notice shall

27

28

this AOC. 101. The certification shall be signed by a responsible official representing Respondent. The representative shall make the following attestation: "I certify that the information contained in or accompanying this certification is true, accurate, and complete." For purpose AOC, a responsible official is a corporate official who is in charge of a principal business and BY: [Respondent] Title Title		
101. The certification shall be signed by a responsible official representing Respondent. The representative shall make the following attestation: "I certify that the inf contained in or accompanying this certification is true, accurate, and complete." For purpor AOC, a responsible official is a corporate official who is in charge of a principal business: BY:	1	not, however, terminate Respondent's obligation to comply with Sections XVII, XXI, and XXII of
Respondent. The representative shall make the following attestation: "I certify that the inf contained in or accompanying this certification is true, accurate, and complete." For purper AOC, a responsible official is a corporate official who is in charge of a principal business: BY:	2	this AOC.
contained in or accompanying this certification is true, accurate, and complete." For purpose AOC, a responsible official is a corporate official who is in charge of a principal business: BY:	3	101. The certification shall be signed by a responsible official representing the
AOC, a responsible official is a corporate official who is in charge of a principal business: BY:	4	Respondent. The representative shall make the following attestation: "I certify that the information
BY: DATE:	5	contained in or accompanying this certification is true, accurate, and complete." For purposes of this
8 BY:	6	AOC, a responsible official is a corporate official who is in charge of a principal business function.
9 (Respondent) Title 10 11 12 13 14 BY:	7	
10 11 12 13 14 BY:	8	BY: DATE:
11 12 13 14 BY:	9	(Respondent) Title
12 13 14 BY:	10	
BY:	11	
BY: DATE: David Croxton, Unit Manager, Office of Environmental Cleanup U.S. Environmental Protection Agency U.S. Environmental Protection Agency 20 21 22 23 24 25 26 27	12	
David Croxton, Unit Manager, Office of Environmental Cleanup U.S. Environmental Protection Agency U.S. Environmental Cleanup U.S. Environmental Protection Agency	13	
U.S. Environmental Protection Agency	14	BY: DATE:
17 18 19 20 21 22 23 24 25 26 27	15	David Croxton, Unit Manager, Office of Environmental Cleanup
18 19 20 21 22 23 24 25 26 27	16	U.S. Environmental Protection Agency
19 20 21 22 23 24 25 26 27	17	
20 21 22 23 24 25 26 27	18	
21 22 23 24 25 26 27	19	
22 23 24 25 26 27	20	
23 24 25 26 27	21	
24 25 26 27	22	
25 26 27	23	
26 27	24	
27	25	
	26	
28 ADMINISTRATIVE ORDER ON CONSENT FOR REMEDIAL INVESTIGATION AND FEASIBILITY STUDY - Page 35	27	
	28	ADMINISTRATIVE ORDER ON CONSENT FOR REMEDIAL INVESTIGATION AND FEASIBILITY STUDY - Page 35